

CLAIMS

1. A wireless communication apparatus for carrying out communication by switching between a plurality of different carriers, the wireless communication apparatus
5 comprising:

a packet continuation determining section that determines whether packet communication is continuing or paused;

a suppressing section that suppresses a switch from
10 a carrier currently used for communication to a different carrier or another carrier when the packet communication is determined to be continuing and that allows the switch to the different carrier when the packet communication is determined to be paused; and
15 a carrier reception quality measuring section that measures reception quality of the different carrier the switch to which is allowed by the suppressing section.

2. The wireless communication apparatus according to
20 claim 1, wherein the packet continuation determining section determines that the packet communication is continuing if the packet communication is resumed within a first predetermined time after a pause of said packet communication and determines that the packet
25 communication is paused if the packet communication is not carried out for the first predetermined time.

3. The wireless communication apparatus according to
claim 1, wherein the suppressing section allows the switch
to the different carrier if the packet communication
continues for over or equal to a second predetermined
5 time that is longer than the first predetermined time.

4. The wireless communication apparatus according to
claim 1, further comprising a continuous data
communication determining section that determines
10 whether or not continuous data communication is carried
out,

wherein, when the continuous data communication is
determined to be carried out, the suppressing section
allows the switch to the different carrier even if the
15 packet communication is continuing.

5. The wireless communication apparatus according to
claim 1, wherein the packet continuation determining
section determines whether the packet communication is
20 continuing or paused based on packet pause information
indicating to pause the packet communication transmitted
from a communicating party.

6. The wireless communication apparatus according to
25 claim 1, further comprising a transmission rate acquiring
section that acquires a transmission rate of the packet
communication,

wherein the suppressing section allows the switch to the different carrier even if the packet communication continuing when the transmission rate is lower than a predetermined value.

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7. The wireless communication apparatus according to claim 1, further comprising a packet quality measuring section that measures the packet quality or the reception quality of the received packet,

10 wherein, when the packet quality is poorer than a predetermined quality, the suppressing section allows the switch to the different carrier even if the packet communication is continuing.

15 8. The wireless communication apparatus according to claim 1, further comprising a movement speed estimating section that estimates a movement speed of the wireless communication apparatus,

20 wherein, when the movement speed is greater than a predetermined value, the suppressing section allows the switch to the different carrier even if the packet communication is continuing.

25 9. A wireless communication terminal apparatus comprising the wireless communication apparatus of claim 1.

10. A wireless communication method for carrying out communication by switching between a plurality of different carriers, the method comprising the steps of:

determining whether packet communication is
5 continuing or paused;

suppressing a switch from a carrier currently used for communication to a different carrier or another carrier when the packet communication is determined to be continuing and allowing the switch to the different

10 carrier when the packet communication is determined to be paused; and

measuring reception quality of the different carrier the switch to which is allowed.